

Cofe & Burnelly TAR & CHEMICAL CORPORATION

To: H. L. Finch - St. Louis Park

office Laboratory - Indianapolis

FROM. V. R. Wheeler

DATE December 8, 1969

suspect: Air Pollution - St. Louis Park

At the request of P. C. Reilly I have given some thought to improving your air pollution control. These suggestions are based on limited knowledge of your operation and problems so am forwarding them for your consideration. If we can come up with solutions we feel satisfactory I presume it may be possible to proceed with installation.

I believe you indicated that the still receiver pan vents were the worst offenders, even after installation of the water scrubbers. Here are several thoughts.

It appears that your pan ventilating flow is now very small; for design purposes I feel that 50 cfm per pan would be reasonable, provided that use of agitating steam or other practice does not invalidate this assumption (Total air, gas, or air-gas - 400 SCM:). Do you feel this is adequate? If your present scrubber can be modified by addition of a cooler to remove oil and solids satisfactorily, and if the 4" pitch line running to the boiler room is not otherwise used, it would be possible to deliver the non-condensable portion of the pan ventilation to the boiler as indicated in Sketch 1. Note that the so called scrubber is intended only to remove oil fog and solids.

If the above is not practical I would suggest an installation such as shown on sketch 2, which would incinerate ventilation air at 1000-1400°F, while permitting safe flaring even if the ventilation gas became 100% combustible.

The exhaust from your pitch tank condenser might also be tied into the above set ups if a fixed gas problem is involved.

I believe everyone agreed that the pollution on removing trams from the cylinders was not of large magnitude, though difficult to correct. Perhaps this problem can be left till last.

The treating cylinder ejector exhaust was mentioned as an offender. Fitting a condenser will not be difficult but it will require water, air condensers being too complicated on steam-water systems at zero temporaturer. If you can furnish nameplate information and steam

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consumption, a condenser may be selected. Our information, which may or may not be correct, indicates that you have an Elliot #10 AL ejector using about 350 lbs. steam an hour, which would require 15-25 3.P.M. of water. If the water, and drain (desirably by-passing your waste water oil separator), is not available it might be necessary to install a small cooling tower.

I would be interested in your reaction to the above and in discussing any other trouble spots you may have.

Very truly yours,

W. R. Wheeler

WR::/skh

cc: R. J. Hennessy H. R. Horner